Chapter 12 Review: DNA and Protein Synthesis

Vocabulary

1. Studied X-ray diffraction of DNA.
2. First to create the double helix model of DNA.
3. Protein ‘ball’ in a chromosome.
4. Replication enzyme.
5. DNA duplication.
6. Singles in DNA that indicate where to make RNA.
7. Coded DNA instructions that control the production of proteins.
8. Genes not involved in coding for proteins.
9. Genes involved in coding for proteins.
10. Monomer of DNA.
11. 3 components of a nucleotide.
12. 4 nitrogen bases.
13. Complementary base pairs.
14. DNA sugar.
15. RNA sugar.
16. RNA bases.
17. mRNA structure.
18. mRNA function.
19. 3 types of RNA.
20. DNA copies itself.
21. Single ringed bases.
22. Double ringed bases.
23. ½ old, ½ new.
24. Attractive force between bases.
25. DNA rungs.
26. DNA backbone.
27. DNA size.
28. DNA function.
29. Site of protein synthesis.
30. Shape of tRNA.
31. Function of tRNA
32. Shape of rRNA.
33. DNA copies to mRNA.
34. Enzyme involved in 25.
35. Formation of an amino acid chain.
36. 3 bases on mRNA.
37. 3 bases in tRNA.
38. Types of gene mutations.
39. Types of chromosome mutations.
40. Extra sets of chromosomes in an organism.

Discussion

1. Explain DNA replication.
2. Explain protein synthesis.
3. Discuss the various types of mutations. Identify their general causes.
4. Discuss examples of what mutations can cause.
5. Discuss the differences in mutations occurring in somatic cells and those that occur in body cells.